Size: 340 acres
Mission: Test, prove, overhaul, and issue torpedoes
HRS Score: 32.61; placed on NPL in October 1989
IAG Status: Federal Facility Agreement signed in 1990
Contaminants: VOCs, heavy metals, petroleum hydrocarbons, herbicides, fuel, PCBs, and pesticides
Media Affected: Groundwater, surface water, sediment, and soil
Funding to Date: $26.4 million
Estimated Cost to Completion (Completion Year): $38.0 million (FY2016)
Final Remedy in Place or Response Complete Date for All Sites: FY2005

Keyport, Washington

Restoration Background

In September 1995, the BRAC Commission recommended realignment of this installation. The center's responsibility for maintaining combat system consoles and its general industrial workload were moved to Puget Sound Naval Shipyard.

Operations at the installation, including plating, torpedo refurbishing, and disposal practices, contributed to contamination at the site. Since FY84, environmental investigations at the installation have identified site types such as underground storage tanks, sumps, spill sites, a landfill, and an underground trench. Environmental investigations conducted under CERCLA have identified 12 sites.

In FY92, an underground trench and several sumps were excavated, and chromium-contaminated soil was removed and replaced with clean fill at a chromate spill site.

In FY93, the Navy completed Remedial Investigation and Feasibility Study (RI/FS) activities for Operable Unit (OU) 2. Additional RI activities were initiated at Site 1 (OU1) because of public concern. Temporary buildings located above the landfill at OU1 were vacated and removed. In FY94, a Record of Decision (ROD) was signed for OU2 (Sites 2, 5, 8, and 9). In FY95, the Navy began additional groundwater sampling at OU1 and conducted a Phase I Removal Action at Site 8 (OU2). The Navy also conducted interim corrective measures for Site 23 and performed a corrective action consisting of removal and closure in place for hazardous waste storage tanks and sumps.

During FY96, the Navy conducted additional groundwater, sediment, and tissue sampling and analysis at OU1 and began long-term monitoring (LTM) at Sites 2 and 8 (OU2). Pursuant to the OU2 ROD, the Navy also completed the confirmational groundwater sampling at Site 5 and sediment sampling at Site 9, making these No Further Action sites. Work plans for Phase II soil removal were initiated at Site 8. Corrective measures, including removal of tanks and soil and in situ remediation of contaminated soil, were conducted at Site 23. In FY97, USGS developed a groundwater flow model and performed degradation analysis and tritium dating in support of natural attenuation at OU1. The University of Washington also provided information on phytoremediation. In addition, the Navy continued LTM of groundwater at Sites 2 and 8 (OU2).

A technical review committee was formed in FY89 and was converted to a Restoration Advisory Board (RAB) in FY95. A community relations plan (CRP) was completed in late FY90. The CRP was updated in FY96. In FY97, the RAB, regulators, and technical experts worked to identify technological alternatives for the OU1 Focused Feasibility Study (FFS).

FY98 Restoration Progress

The Navy completed the FFS, the Proposed Plan (PP), and the ROD for OU1. The selected remedies included phytoremediation, sediment removal, tide gate upgrade, institutional controls (ICs), and LTM (including natural attenuation). The Navy also began the Phase II removal of metals-contaminated soil at Area 8 (OU2). In addition, the Navy continued LTM at OU2 and groundwater monitoring at Sites 2 and 8.

The RAB was closely involved throughout the cleanup process at OU1. It helped find possible remedial technologies and short-list remedial alternatives and provided input about the selected remedy. This was done through RAB meetings, open discussions, and "homework assignments." Communication with the community was a key to a successful and accepted PP. During the scoping of the OU1 FFS, the Navy met with federal and state fish and wildlife agency personnel, the state wetlands staff, the Suquamish tribe, and the Washington State Department of Ecology to focus on all stakeholder needs. The Navy also worked with USGS and the University of Washington on developing preferred alternative cleanup technologies.

At Site 8 (OU2), the Navy and Remedial Action (RA) contractors worked together in developing revised work plans to enable continued remediation despite the delayed completion of the new plating plant.

Plan of Action

- Complete Remedial Design for phytoremediation, sediment removal, and tide gate upgrade for OU1 in FY99
- Begin phytoremediation for OU1 in FY99
- Complete RA for sediment removal and tide gate upgrade for OU1 in FY99
- Develop IC plan (ICP) and work plans for LTM for OU1 in FY99
- Complete RA at Site 8 in FY99
- Continue LTM and implementation of ICP at OUs 1 and 2 in FY00
- Continue operations and maintenance at OU1 in FY00
- Complete corrective action at Site 23 in FY00
- Complete RAs at all sites in FY00

Sites Achieving RIP or RC Per Fiscal Year